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OFFICE OF THE SECRETARY

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30 COUNTRIES

January 13, 2000

Magalie Roman Salas, Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re: Comments of Telecommunications for the Deaf, Inc. and  
The Consumer Action Network  
Implementation of Sections 255 and 251(a)(2) of the Communications Act  
WT Docket No. 96-198**

Dear Ms. Salas:

Transmitted herewith, on behalf of Telecommunications for the Deaf, Inc. and The Consumer Action Network, is an original and nine (9) copies of its Comments in the above-referenced rulemaking proceeding.

Should there be any questions, please contact undersigned counsel.

Sincerely,



Lee G. Petro

Enclosures

DC01/322834.1

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List A B C D E

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

**Implementation of Sections 255 and  
251(a)(2) of the Communications Act  
of 1934, as Enacted by the  
Telecommunications Act of 1996** )  
)  
)  
)  
**Access to Telecommunications Service,  
Telecommunications Equipment and  
Customer Premises Equipment  
by Persons with Disabilities** )  
)  
)

**WT Docket No. 96-198**

**TO: THE COMMISSION**

**COMMENTS OF  
TELECOMMUNICATIONS FOR THE DEAF, INC.  
AND  
THE CONSUMER ACTION NETWORK**

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January 13, 2000

## **PREVIEW**

Telecommunications for the Deaf, Inc. and The Consumer Action Network hereby submit their Comments relating to the implementation of Section 255 of the Communications Act of 1934 with respect to Internet Telephony. As discussed more fully below, both organizations strongly urge the Commission to extend Section 255 requirements of accessibility to internet telephony and the related computer based equipment.

The Commission is in a unique position to require the accessibility of internet telephony for all Americans before further development of the technology. Rather than attempting to “retrofit” accessibility standards on the industry once it is widespread, the Commission can set the foundation for the next generation of telecommunications services now, thus assuring the ability for all future generations to use this innovative technology. Such efforts at this point will permit persons with disabilities to play a meaningful role in the development of the technology, and will help eliminate future technological difficulties.

Therefore, the Commission is urged to include internet telephony as a “telecommunications service,” and ensure that all Americans, including people with disabilities, will have full access to the enormous benefits to be offered by internet telephony.

DC01/322821.1

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DC01/322808.1

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

**Implementation of Sections 255 and  
251(a)(2) of the Communications Act  
of 1934, as Enacted by the  
Telecommunications Act of 1996** )  
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**Access to Telecommunications Service,  
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**WT Docket No. 96-198**

**TO: THE COMMISSION**

**COMMENTS OF  
TELECOMMUNICATIONS FOR THE DEAF, INC.  
AND  
THE CONSUMER ACTION NETWORK**

**I. INTRODUCTION**

Telecommunications for the Deaf, Inc. ("TDI"), by and through its attorneys, and The Consumer Action Network (collectively the "Associations"), hereby submit comments to the Federal Communications Commission ("Commission") in response to the Notice of Inquiry ("NOI") in WT Docket No. 96-198.<sup>1</sup> The Associations view this proceeding on the implementation of Section 255 of the Communications Act of 1934 (the "Act") as perhaps the most profound and important legislative initiative to impact the quality of life for our membership since the enactment of the Americans with Disabilities Act ("ADA").

The NOI sought comment on the development and implementation of Internet Telephony and the related computer based equipment. As discussed more fully below, the Associations

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<sup>1</sup> Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, *Report and Order and Further Notice of Inquiry*, WT Docket No. 96-198 (rel. Sept. 29, 1999).

believe that the development of this service will provide people with disabilities with enormous opportunities to expand their ability to communicate with others thereby narrowing the “accessibility gap” in current telecommunications services. TDI is a national consumer organization that seeks to represent the interests of the twenty-eight million Americans who are deaf, hard of hearing, late deafened and deaf-blind. TDI’s mission is to promote equal access to telecommunications and media for people who are deaf, hard of hearing, late deafened and deaf-blind. It accomplishes that mission via the following activities: consumer education and involvement, technical assistance and consulting, application of existing and emerging technologies, networking and collaboration, uniformity of standards, and national policy development and advocacy.

The Consumer Action Network (“CAN”) is a coalition of national organizations of, by, and for the deaf, hard of hearing, late-deafened, or deaf-blind, that also seeks to protect and expand the rights of individuals who are deaf, hard-of-hearing, late-deafened, and deaf-blind in education, employment, telecommunications, technology, health care, and community life.<sup>2</sup>

In the course of this complex proceeding, TDI has both applauded and noted to the Commission the significant number of consumer commenters who have taken considerable time and effort to participate in the comment process for this rulemaking. With the release of the NOI on September 29, 1999, the Commission reaffirms its commitment to seek the best possible use for developing technology in advancing the telecommunications opportunities available to all persons with disabilities.

Chairman Kennard’s remarks before the TDI Gala at Gallaudet University on December 5, 1998, presaged the quality of public interaction (in which we are very pleased to

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<sup>2</sup> See Attachment A for a complete list of CAN member organizations.

cooperate through the submission of these Comments) on the applicability of Internet telephony under Section 255 of the Act:

The telecommunications industry is in the midst of a great revolution. It is a revolution that promises to allow us to communicate anytime, anyplace, in any mode -- voice, data, image, video, and multimedia. It includes using intelligent, programmable wireline and wireless networks and associated end user equipment. One can envision two possible outcomes from such a revolution.

On the one hand, properly harnessed, these networks and devices create a potent platform upon which to serve the needs of all of our citizens, including those with disabilities. They create new and expanded opportunities for accessibility and inclusiveness. On the other hand, if these powerful new platforms are not designed, developed and fabricated to be accessible to -- and usable by -- individuals with disabilities, then, as they evolve, people with disabilities will become isolated rather than empowered.<sup>3</sup>

Therefore, the Commission is in the unique position to establish clear standards for the telecommunications industry *before* internet telephony becomes a household tool. Only by establishing such standards now will the Commission comply with Section 255 of the Communications Act, and ensure that all Americans can access this telecommunications service.

## **II. INTERNET TELEPHONY AND COMPUTER BASED EQUIPMENT ARE "TELECOMMUNICATIONS SERVICES" FOR PURPOSES OF THE IMPLEMENTATION OF SECTION 255.**

There are two basic types of internet telephony currently being developed and refined, computer-to-computer and phone-to-phone. With respect to computer-to-computer internet telephony, both users must install compatible software on each computer and be logged on to the Internet at the same time. Phone-to-phone internet telephony involves the use of a "gateway"

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<sup>3</sup> *Remarks of William E. Kennard*, Telecommunications for the Deaf, Inc. Gala, Gallaudet University, Washington, D.C., Dec. 5, 1998, <<http://www.fcc.gov/Speeches/Kennard/spwek836.html>>.

that routes the signal from the public switched telephone network (“PSTN”) over to the Internet, and then back over to the PSTN at the receiving end.<sup>4</sup>

The central question posed in the NOI is whether internet telephony can be defined as a “telecommunications service” under the Communications Act. *NOI*, ¶ 175. If this service is included in the definition of a “telecommunications service,” Section 255 of the Act will require that internet telephony be developed so that it is accessible to individuals with disabilities.

As discussed below, the Associations contend that internet telephony falls under the definition of “telecommunications services” and is therefore covered under Section 255. If the language of Section 255 is not adequately clear, the Associations affirm that the spirit and intent of the Section 255 is applicable to internet telephony. Even if the Commission believes that Section 255 doesn’t apply to internet telephony, the Associations believe that the FCC can still exercise its ancillary jurisdiction to require full accessibility. Section 3(46) of the Act defines a “telecommunications service” as:

the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

47 U.S.C. § 153(46) (1998). The Commission has further clarified that the telecommunications service is the basic “transmission capability,” as opposed to an “information service” which only permits the user to manipulate the information provided by the telecommunications service.<sup>5</sup>

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<sup>4</sup> Federal-State Joint Board on Universal Service, *Report to Congress*, 13 FCC Rcd 11501, ¶¶ 83-85 (1998) (“Report to Congress”).

<sup>5</sup> *Id.* Section 3(20) of the Communications Act defines an “information service” as: the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.

47 U.S.C. § 153(20) (1998).

In its 1998 *Report to Congress*, the Commission reviewed whether internet telephony was a “telecommunications service.” While it declined to make a definitive decision, it did indicate that “certain ‘phone-to-phone IP telephony’ services lack the characteristics that would render them ‘information services’ within the meaning of the statute, and instead bear the characteristics of ‘telecommunications services.’” *Id.* ¶83.

Additionally, the Commission has found that certain service options, including operator-assisted services for text telephone (TTY), are considered “adjunct-to-basic” services, and thus are telecommunications services as defined under the Act. Central to this decision was the fact that these services “facilitate the use of traditional telephone services...and do not alter that fundamental character of TTY-TTY telephone service.”<sup>6</sup>

In the NOI, the Commission declined to expand the applicability of Section 255 to “information” services.”<sup>7</sup> Finding that Section 255 was purposely limited to “telecommunications services,” the Commission noted that Congress did not intend to either (a) expand the definition of telecommunications services, or (b) require “information services” to be covered by Section 255. However, the Commission did include two services that have not been defined as strictly telecommunications services.

The Commission specifically noted that voicemail and interactive menus are “information services that are critical to making telecommunications accessible and usable by people with disabilities.” *NOI*, ¶ 93. Finding that Section 255 could not be implemented on a

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<sup>6</sup> Establishment of a Funding Mechanism for Interstate Operator Services for the Deaf, *Memorandum Opinion and Order*, 11 FCC Rcd 6808, 6817 (1996).

<sup>7</sup> *NOI*, ¶ 78 (citing Amendment of Section 64.702 of the Commission's Rules and Regulations (*Computer II*), Docket No. 20828, Final Decision, 77 FCC 2d 384, 435 (1980), *recon.*, 84 FCC 2d 50 (1980), *further recon.*, 88 FCC 2d 512 (1981), *aff'd sub nom.* Computer and Communications Industry Ass'n v. FCC, 693 F.2d 198 (D.C. Cir. 1982), *cert. denied*, 461 U.S. 938 (1983).

meaningful basis otherwise, the Commission asserted its ancillary jurisdiction over two specific information services, and included voicemail and interactive menus as services that are required by Section 255 to be accessible to those with disabilities. *Id.* ¶ 99 (citing *U.S. v. Southwestern Cable Co.*, 392 U.S. 157 (1968)).

Therefore, the Commission may require manufacturers and telecommunications service providers to ensure accessibility for people with disabilities to those services that are either deemed to be “telecommunications” services, and to those services that, absent full accessibility, would thwart the full and meaningful implementation of Section 255. The Associations do not have a position as to whether the Commission should consider internet telephony as a telecommunications service for purposes of its Universal Fund or other regulatory matters. However, the Associations believe that the Commission is required to establish the fundamental standards for the new technology to ensure full accessibility. As discussed below, internet telephony will provide a revolutionary method for persons with disabilities to communicate. In light of the substantial potential provided by internet telephony, and its integral role in the future of telecommunications services, it is clear that the Commission must ensure that all Americans, including those with disabilities, have complete, equal access to the fullest extent possible.

### **III. INTERNET TELEPHONY HAS THE POTENTIAL FOR TREMENDOUS OPPORTUNITIES FOR NEW TELECOMMUNICATIONS SERVICES FOR ALL AMERICANS.**

The wide-spread introduction of internet telephony will dramatically alter the future landscape of telecommunications services. It is foreseeable that in a few short years, many telecommunications companies will begin transmitting their phone service over the public internet. While the Associations are encouraged that, in some cases, persons with disabilities

have been able to use internet telephony without noticeable problems, the Commission must adopt standards for future applications of internet telephony so that the use of this technology will also enable those with disabilities to access many of the telecommunications services that the general population take for granted. While most persons with disabilities do not currently use internet telephony, such usage would grow exponentially if the service provides full accessibility, greater convenience, a broader range of choices, and less cost at home and in the workplace. Indeed, it will be more effective if internet telephony is fully compatible with others who have or operate on different technologies other than IP telephony.

For example, several of the “dial-around” long distance companies, *i.e.*, 10-10-XXX, have already begun to route their service over the Internet. Individuals who are deaf and are not able, or who prefer, not to use speech typically use two-way live chat by text. On the other hand, individuals who are hard of hearing, or late-deafened, and can use speech and/or residual hearing, prefer to use voice carry-over (“VCO”) and hearing carry-over (“HCO”), which are required services under the Commission’s Telecommunications Relay Services rules and the ADA. However, preliminary research has determined that, absent the adoption of technical standards requiring accessibility to these services for persons with disabilities, both VCO and HCO may suffer interference or other technical problems due to the use of “packet” switched services. We ask that in all situations in which regular telephone users have voice access to telephone services via the Internet, people with disabilities that use relay services have comparable access where technologically feasible. This access should include all types of relay services such as TTY, VCO, HCO, and Speech-to-Speech.

In light of these considerations, the Commission is in the unique position to be at the forefront of a new technology, while at the same time implementing rules to open all

telecommunications services to those with disabilities. Indeed, rather than attempt to “retrofit” accessibility issues after the technology has been developed, the Commission has the opportunity, and the statutory obligation, to consider these matters while developing the rules for internet telephony.

In carrying out this mandate, the Associations encourage the Commission to require manufacturers to include persons with and without disabilities in the development, testing and evaluation of the telecommunications equipment. In addition, the Commission should host forums for industry, government and consumers review, and discuss how the Commission can integrate persons with disabilities into the early design and development process of new telephone equipment.

The Commission also should encourage research and development of innovative equipment with accessibility features. In conjunction with these efforts, the Commission must require testing to ensure that current TTY equipment will continue to be functional on the new telecommunications service. The Commission can appreciate the concerns of persons with disabilities on this issue. This concern is best articulated by reviewing the difference between buying a new product only to find that it is not accessible, as opposed to the discovery of a problem with an existing, operating product which is no longer functional. While the new product may be returned because of its non-accessibility, individuals, business and organizations have utilized TTYs for over 30 years. Should there be a change in the telecommunications services that results in incoherent TTY messaging, the aforementioned parties would not be able to discern whether the TTY equipment itself is malfunctioning, or whether the problems may be attributed to the technological and infrastructure changes with the telephone network.

As such, for internet telephony to blossom and become a well-used medium among

persons with disabilities, the carriers of this telephony, and especially their customer service personnel, must be in a position to explain or resolve such problems for their customers. It is vital that TTY users be able to call any telephone number and hook up to a TTY, a relay service or a computer with a special modem, and have a functionally equivalent call session. Such functional equivalency is required under the ADA.

As stated above, the Commission is in the unique position to enable people with disabilities to access the numerous potential services that could be offered by internet telephony. The Associations believe that it is very important that those in the telecommunications industry and the standards-setting groups include persons with disabilities in the development of the internet telephony standards. Through this involvement, those measures which hinder compatibility between current standards and new internet telephony standards may be avoided. Further, the Associations do not believe that voluntary standards, *i.e.*, V.18 and T.140, are an effective means to carry out the intent of Section 255. Despite numerous requests that the V.18 standard be adopted by the telecommunications industry, little interest has been expressed. Preliminary research indicates that greater accessibility to telecommunications services can be attained if measures to eliminate TTY interference are included in new voice standards, digital text telephony is built into all voice services, and individuals that are hard of hearing or have speech impairments are included in testing and evaluation in areas of audibility and intelligibility, etc.

The Associations are encouraged by the possibility that access to telecommunications services can be enhanced in future multi-media telecommunications services that include text, speech, and video. For example, an international standard for IP telephone and IP multimedia, ITU-TH.323, is currently being developed to combine voice, text and video messaging. This

standard, informally known as “Total Conversation,” will permit many of the current video relay interpreting services to provide a complete communications alternative to people with disabilities. Total Conversation would permit people with disabilities to become involved with tele-medicine, online course-taking with colleges and universities, home banking, conference calling, and participation in political and government activities such as town hall meetings and debates. Finally, the Total Conversation standard would dramatically increase the ability of those with disabilities to participate in live video relay interpreting far and beyond the current 15-30 frames per second capability.

The Commission also is encouraged to adopt standards that would permit many of the common “adjunct-to-basic” services, *i.e.*, call waiting and call forwarding, to be accessible for persons with disabilities using internet telephony services. Finally, the Associations strongly support the accessibility to a wide variety of options to process or charge long distance and other service calls with the customer’s preferred carriers. Since such services will be offered by both computer-to-computer and phone-to-phone internet telephony, the Commission is strongly encouraged to consider both services as “telecommunications services” for purposes of implementing Section 255.

At the same time, the Associations respectfully remind the Commission to pay special attention to ensure that the current services available to deaf, hard of hearing, late-deafened, deaf-blind and speech impaired persons, including TTY, Speech-to-Speech, VCO, HCO and video relay interpreting, do not suffer disruptions during the transition to internet telephony. Based on the substantial negative experiences by individuals with hearing and/or visual disabilities attempting to access voicemail and interactive menu options while using relay

services, the Associations support a smooth transition through effective outreach and education programming with the relay service providers and the corporations offering such phone services.

Additionally, the Associations strongly encourage the Commission to consider the computer based equipment required to utilize internet telephony as “part and parcel” of the telecommunications service, and to thus require complete accessibility by those persons with disabilities. Since this equipment is necessary to connect to the PSTN, it plays an essential role in ensuring the full realization of the advantages of internet telephony. In fact, the Commission determined that equipment which performs a telecommunications function should be covered by Section 255. *NOI*, ¶ 87. As such, if the Commission did not extend the coverage of Section 255’s requirement of accessibility to computer based equipment, it is possible that Section 255 would not be implemented in a complete manner.

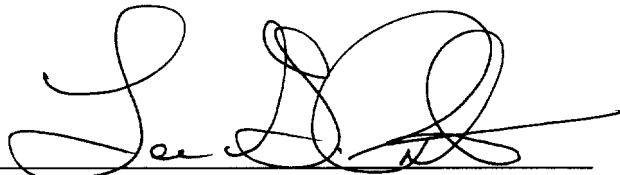
### III. CONCLUSION

It is clear that internet telephony will cause a flood of new services that could significantly assist persons with disabilities in utilizing telecommunications services. Without Commission action, however, it is possible that these services will be introduced without proper attention to the needs of persons with disabilities. Given the likely pervasiveness of internet telephony in the future, the intent of Section 255 of the Communications Act would be substantially thwarted if the Commission did not establish clear requirements to ensure accessibility to these telecommunications services for all Americans.

Respectfully submitted,

**TELECOMMUNICATIONS FOR THE DEAF, INC.  
THE CONSUMER ACTION NETWORK**

By: \_\_\_\_\_



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January 13, 2000

DC01/322595.1

## **ATTACHMENT A**

### **CONSUMER ACTION NETWORK**

#### **Members**

American Association of the Deaf-Blind  
American Society for Deaf Children  
Association of Late-Deafened Adults  
Deaf Seniors of America  
Gallaudet University Alumni Association  
Jewish Deaf Congress  
National Association of the Deaf  
National Black Deaf Advocates  
National Catholic Office for the Deaf, Inc.  
Telecommunications for the Deaf, Inc.  
USA Deaf Sports Federation

#### **Affiliate Members**

American Deafness and Rehabilitation Association  
Convention of American Instructors of the Deaf  
The Caption Center  
Conference of Educational Administrators Serving the Deaf, Inc.  
Registry of Interpreters for the Deaf, Inc.